

A NEW SPECIES OF THE GENUS *AGETOCERA* HOPE (COLEOPTERA:
CHRYSOMELIDAE: GALERUCINAE) FROM CHINA

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Abstract.—*Agetocera biclava*, n. sp., is described from Guangxi Autonomous Region, P. R. China. The adult male, antennae and abdominal sternites of the male and female, male aedeagus, and female spermatheca are illustrated.

Key Words: Coleoptera, Chrysomelidae, Galerucinae, *Agetocera*, taxonomy, new species

The genus *Agetocera* Hope (1840) was established as a monotypic genus containing *A. mirabilis* Hope from India. The genus currently includes 23 world species and is mainly distributed in the Oriental Region. Sixteen species are known from China, ten of which are endemic.

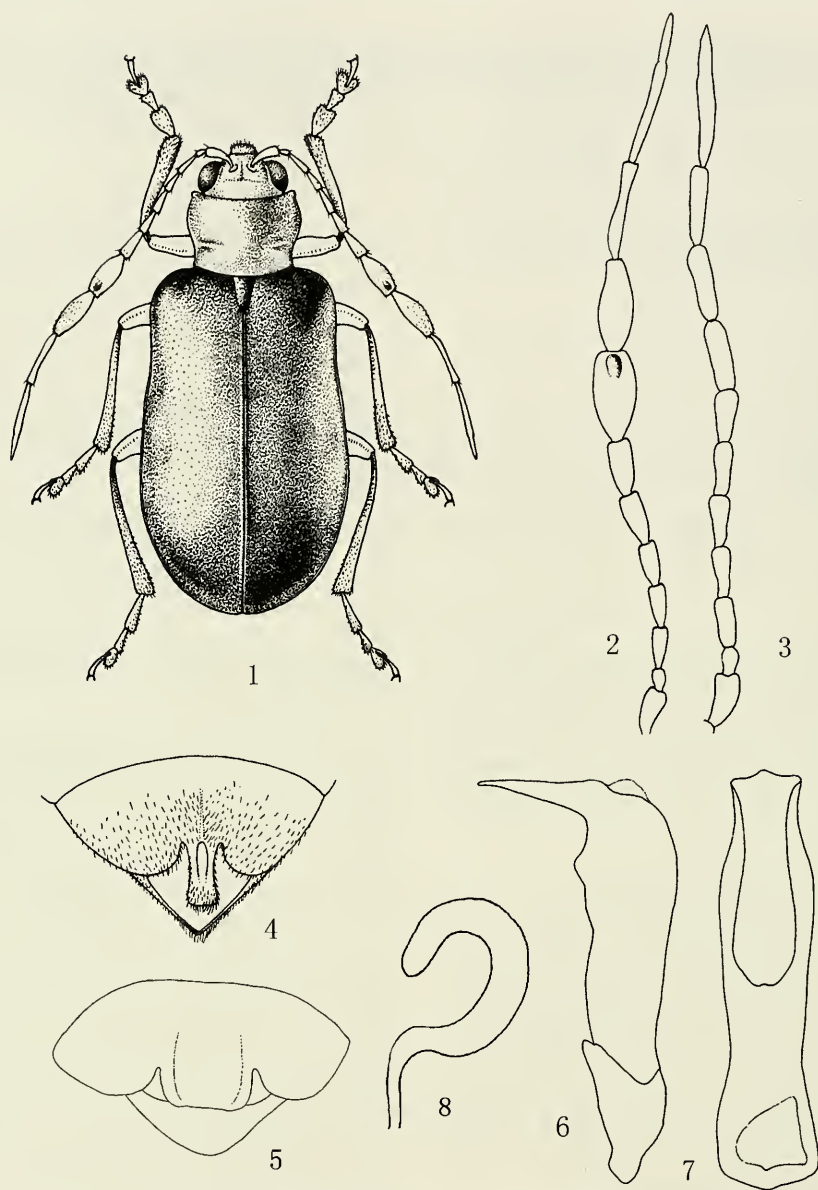
With the studies on *Agetocera* by Chen (1942, 1964), Chujo (1962), Gressitt and Kimoto (1963), Kimoto (1989), Jiang (1992), and Yang et al. (1997, 2001), the taxonomy of this genus is well known. Using the paper by Yang et al. (2001), we discovered another new species of *Agetocera* while identifying specimens from Guangxi Autonomous Region. This paper is a supplement to Yang et al. (2001).

***Agetocera biclava* Zhang and Yang,
new species
(Fig. 1–8)**

Description.—Head, pronotum, and scutellum reddish brown; antenna covered with long hairs, yellowish brown to brown, last two segments dark brown; ventral surface of thorax yellowish brown or lighter; abdomen and femora yellowish brown, apices of femora, tibiae, and tarsi black; elytron

darkish blue. Length 10.5–12.0 mm; width 4.8–5.0 mm.

Male: Head exerted, narrower than prothorax, with vertex convex, smooth and impunctate; postantennal tubercles strong; clypeus raised, with concavity in middle of frontal margin. Maxillary palpus large, third segment longer than fourth, fourth minute and pointed at apex. Eyes strongly convex; interspace between eyes nearly 2 times as wide as diameter of eye. Antenna (Fig. 2) extending behind to middle of elytra; first segment robust; second shortest; third 2 times as long as second and slightly longer than fourth; fourth to fifth equal in length; sixth longer than fourth and subequal to seventh, each broadened at apices; eighth to tenth longer than preceding segments and subequal in length; eighth and ninth very strongly swollen, eighth with an oval concavity on dorsum near apex; eleventh 1.6 times as long as tenth. Pronotum 1.3 times as broad as long, narrow posteriorly, broadened anteriorly; lateral margins and basal margin bordered, front margin not bordered; disc sparsely punctate and with one transverse concavity on each side, with punctures on each of four corners. Scutellum cuneiform and impunctate, concave at



Figs. 1–8. *Agrotocera biclava*. 1, Dorsal habitus, male. 2, Male antenna. 3, Female antenna. 4, Last visible sternite of female. 5, Last visible sternite of male. 6, Lateral view of male aedeagus. 7, Dorsal view of male aedeagus. 8, Spermatheca.

base. Elytron 3.6 times longer than broad; disc convex, more broadly rounded apically than basally; humerus raised; a ridge behind humerus, parallel with lateral margin; disc covered with dense punctures, interspaces larger than diameter of a puncture; epipleuron reaching apex of elytra, slightly bend

toward outer side, sparsely and finely punctate. Meson of last visible sternite deeply concave; pygidium rounded apically (Fig. 5). Aedeagus in Figs. 6–7; in dorsal view lateral margins sinuate, broadened in middle, then narrowed basally and apically, broadened at apex and base; in lateral view

apex of aedeagus bent ventrally at nearly a right angle.

Female: Antennal segment three 2 times as long as second, third to seventh subequal in length, eighth to tenth subequal to each other in length, eleventh 1.5 times as long as tenth (Fig. 3). Pronotum 1.5 times as broad as long. Last visible sternite with long apical projection in middle (Fig. 4). Spermatheca (Fig. 8) with apex invaginated toward base of capsule, C-shaped, walls obviously thicker than that of ductus and surface apparently smooth at lower magnification.

Types.—Holotype ♂, P. R. China: Guangxi Auto. Reg.: Tianlin, 1,600 m, 5-VI-2002, Coll. Jiang Guo-fang. Paratypes: 1 ♂, 1 ♀, same locality as holotype, 1,300–1,400 m, 28-VI-2002, Coll. Liu Jian-wen; 2 ♀, 1,600 m, 5-VI-2002, Coll. Jiang Guo-fang. All deposited in the Zoological Museum, Institute of Zoology, Chinese Academy of Sciences, Beijing, P. R. China.

Etymology.—The specie epithet is based on the enlarged eighth and ninth antennal segments of the male.

Remarks.—All species of *Agetocera* have the eighth and ninth segments of the male antennae modified except *Agetocera filicornis* Laboissiere. This is an important and easy character to identify different species. Also, the shape of last female sternite, aedeagus, and spermatheca are very different among species. This new species can be separated from other known species by the enlarged eighth and ninth segments of the male antennae, the long apical projection of the last sternite of the female, the apex of aedeagus bent ventrally in lateral view, and the C-shaped spermatheca.

Agetocera biclava is similar to *Agetocera filicornis*, but differs in the shape of the male antennae and the last visible sternite of the female, the former with the eighth and ninth segments of the male antenna swollen and the last visible sternite with a long apical projection in the middle, with the projecting portion thin. In *A. filicornis*, the male antennae are normal, not swollen,

and the apical projecting portion of the last visible sternite of the female is broad. This new species is also similar to *A. taiwana* Chujo, as in the following key:

This new species may be placed in the previous key to species (Yang et al. 2001) as follows:

- 14. Male with antennal segment 8 shorter than 5 to 7 combined 15
 - Male with antennal segment 8 longer than 5 to 7 combined 16
- 15. In male, third antennal segment 2 times longer than second; eighth with an oval concavity on dorsum near apex; ninth elongate, subequal to eighth in length; tibiae and tarsi black *A. biclava*, n. sp.
 - In male, third antennal segment 1.5 times longer than second; eighth with a rectangular convexity apically; ninth deplanate and broad, almost triangular, shorter than eighth; tibiae and tarsi yellowish brown, last two tarsal segments brown *A. taiwana* Chujo
- 16. In male, ninth antennal segment U-shaped, half as long as tenth; female with last visible sternite concave mesally *A. similes* Chen
 - In male, ninth antennal segment not U-shaped and more than half as long as tenth; female with last visible sternites convex mesally 17

ACKNOWLEDGMENTS

We thank Wen-zhu Li and Si-qin Ge for drawing part of the figures. This research was supported by the Chinese Academy of Sciences Innovation Program.

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